

Pedigree Analysis

Biology

Reading a family tree, and identifying the inheritance pattern.

Diagnostic clues for each pattern.

Pattern	Clue
Autosomal dominant	Appears every generation; affected have an affected parent
Autosomal recessive	Can skip generations; unaffected parents, affected child
X-linked recessive	Mostly males; no father-to-son transmission
X-linked dominant	Affected fathers pass to all daughters, no sons
Mitochondrial	Only mothers transmit; all children affected

No father-to-son transmission is the signature of X linkage: a father gives his son a Y, never his X.